

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-130717-1

Client Project/Site: GKM - Region 8 (LTM)

For:

Weston Solutions, Inc.

1435 Garrison Street

Suite 100

Lakewood, Colorado 80215

Attn: Jeff Bryniarski



Authorized for release by:

10/17/2016 2:57:44 PM

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Method Summary

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

## Sample Summary

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-130717-1	A73_100316	Water	10/03/16 00:00	10/05/16 09:14
680-130717-2	A75D_100316	Water	10/03/16 00:00	10/05/16 09:14
680-130717-3	A75D_100316D	Water	10/03/16 00:00	10/05/16 09:14
680-130717-4	AR19-3_100416	Water	10/04/16 00:00	10/05/16 09:14
680-130717-5	AR2-7a_100416	Water	10/04/16 00:00	10/05/16 09:14
680-130717-6	AR2-7_100416	Water	10/04/16 00:00	10/05/16 09:14
680-130717-7	AR2-7_100416D	Water	10/04/16 00:00	10/05/16 09:14
680-130717-8	FW-012_100216	Water	10/02/16 00:00	10/05/16 09:14

## Definitions/Glossary

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

**Job ID: 680-130717-1**

**Laboratory: TestAmerica Savannah**

### Narrative

## CASE NARRATIVE

**Client: Weston Solutions, Inc.**

**Project: GKM - Region 8 (LTM)**

**Report Number: 680-130717-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 10/05/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 18.4 C.

### LOW LEVEL MERCURY

Samples A73\_100316 (680-130717-1), A75D\_100316 (680-130717-2), A75D\_100316D (680-130717-3), AR19-3\_100416 (680-130717-4), AR2-7a\_100416 (680-130717-5), AR2-7\_100416 (680-130717-6), AR2-7\_100416D (680-130717-7) and FW-012\_100216 (680-130717-8) were analyzed for Low Level Mercury in accordance with EPA Method 1631E. The samples were prepared on 10/12/2016 and analyzed on 10/13/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### LOW LEVEL MERCURY

Samples A73\_100316 (680-130717-1), A75D\_100316 (680-130717-2), A75D\_100316D (680-130717-3), AR19-3\_100416 (680-130717-4), AR2-7a\_100416 (680-130717-5), AR2-7\_100416 (680-130717-6), AR2-7\_100416D (680-130717-7) and FW-012\_100216 (680-130717-8) were analyzed for Low Level Mercury in accordance with EPA Method 1631. The samples were prepared on 10/12/2016 and analyzed on 10/13/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

**Client Sample ID: A73\_100316**

**Lab Sample ID: 680-130717-1**

Date Collected: 10/03/16 00:00

Matrix: Water

Date Received: 10/05/16 09:14

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.88		0.50	0.20	ng/L		10/12/16 15:35	10/13/16 10:02	1

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.39	J	0.50	0.20	ng/L		10/12/16 15:35	10/13/16 12:18	1

**Client Sample ID: A75D\_100316**

**Lab Sample ID: 680-130717-2**

Date Collected: 10/03/16 00:00

Matrix: Water

Date Received: 10/05/16 09:14

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.87		0.50	0.20	ng/L		10/12/16 15:35	10/13/16 10:11	1

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35	J	0.50	0.20	ng/L		10/12/16 15:35	10/13/16 12:26	1

**Client Sample ID: A75D\_100316D**

**Lab Sample ID: 680-130717-3**

Date Collected: 10/03/16 00:00

Matrix: Water

Date Received: 10/05/16 09:14

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.83		0.50	0.20	ng/L		10/12/16 15:35	10/13/16 10:19	1

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.45	J	0.50	0.20	ng/L		10/12/16 15:35	10/13/16 12:34	1

**Client Sample ID: AR19-3\_100416**

**Lab Sample ID: 680-130717-4**

Date Collected: 10/04/16 00:00

Matrix: Water

Date Received: 10/05/16 09:14

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.91		0.50	0.20	ng/L		10/12/16 15:35	10/13/16 10:44	1

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.50	0.20	ng/L		10/12/16 15:35	10/13/16 12:42	1

**Client Sample ID: AR2-7a\_100416**

**Lab Sample ID: 680-130717-5**

Date Collected: 10/04/16 00:00

Matrix: Water

Date Received: 10/05/16 09:14

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.6		0.50	0.20	ng/L		10/12/16 15:35	10/13/16 10:53	1

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# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

**Client Sample ID: AR2-7a\_100416**

**Date Collected: 10/04/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-5**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.50	0.20	ng/L	—	10/12/16 15:35	10/13/16 12:51	1

**Client Sample ID: AR2-7\_100416**

**Date Collected: 10/04/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-6**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.4		0.50	0.20	ng/L	—	10/12/16 15:35	10/13/16 11:01	1

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.50	0.20	ng/L	—	10/12/16 15:35	10/13/16 12:59	1

**Client Sample ID: AR2-7\_100416D**

**Date Collected: 10/04/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-7**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.4		0.50	0.20	ng/L	—	10/12/16 15:35	10/13/16 11:09	1

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.50	0.20	ng/L	—	10/12/16 15:35	10/13/16 13:07	1

**Client Sample ID: FW-012\_100216**

**Date Collected: 10/02/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-8**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.96		0.50	0.20	ng/L	—	10/12/16 15:35	10/13/16 11:18	1

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.50	0.20	ng/L	—	10/12/16 15:35	10/13/16 13:16	1

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# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

## Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 400-326525/1-A  
Matrix: Water  
Analysis Batch: 326666

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 326525

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.50	0.20	ng/L	—	10/12/16 16:12	10/13/16 09:03	1

Lab Sample ID: LCS 400-326525/2-A  
Matrix: Water  
Analysis Batch: 326666

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 326525

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.63		ng/L	—	93	79 - 121

Lab Sample ID: LCSD 400-326525/3-A  
Matrix: Water  
Analysis Batch: 326666

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 326525

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	5.00	4.65		ng/L	—	93	79 - 121	0	20



# QC Association Summary

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

## Metals

### Prep Batch: 326525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130717-1	A73_100316	Dissolved	Water	1631E	
680-130717-1	A73_100316	Total/NA	Water	1631E	
680-130717-2	A75D_100316	Dissolved	Water	1631E	
680-130717-2	A75D_100316	Total/NA	Water	1631E	
680-130717-3	A75D_100316D	Dissolved	Water	1631E	
680-130717-3	A75D_100316D	Total/NA	Water	1631E	
680-130717-4	AR19-3_100416	Dissolved	Water	1631E	
680-130717-4	AR19-3_100416	Total/NA	Water	1631E	
680-130717-5	AR2-7a_100416	Dissolved	Water	1631E	
680-130717-5	AR2-7a_100416	Total/NA	Water	1631E	
680-130717-6	AR2-7_100416	Dissolved	Water	1631E	
680-130717-6	AR2-7_100416	Total/NA	Water	1631E	
680-130717-7	AR2-7_100416D	Dissolved	Water	1631E	
680-130717-7	AR2-7_100416D	Total/NA	Water	1631E	
680-130717-8	FW-012_100216	Dissolved	Water	1631E	
680-130717-8	FW-012_100216	Total/NA	Water	1631E	
MB 400-326525/1-A	Method Blank	Total/NA	Water	1631E	
LCS 400-326525/2-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-326525/3-A	Lab Control Sample Dup	Total/NA	Water	1631E	

### Analysis Batch: 326666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-130717-1	A73_100316	Dissolved	Water	1631E	326525
680-130717-1	A73_100316	Total/NA	Water	1631E	326525
680-130717-2	A75D_100316	Dissolved	Water	1631E	326525
680-130717-2	A75D_100316	Total/NA	Water	1631E	326525
680-130717-3	A75D_100316D	Dissolved	Water	1631E	326525
680-130717-3	A75D_100316D	Total/NA	Water	1631E	326525
680-130717-4	AR19-3_100416	Dissolved	Water	1631E	326525
680-130717-4	AR19-3_100416	Total/NA	Water	1631E	326525
680-130717-5	AR2-7a_100416	Dissolved	Water	1631E	326525
680-130717-5	AR2-7a_100416	Total/NA	Water	1631E	326525
680-130717-6	AR2-7_100416	Dissolved	Water	1631E	326525
680-130717-6	AR2-7_100416	Total/NA	Water	1631E	326525
680-130717-7	AR2-7_100416D	Dissolved	Water	1631E	326525
680-130717-7	AR2-7_100416D	Total/NA	Water	1631E	326525
680-130717-8	FW-012_100216	Dissolved	Water	1631E	326525
680-130717-8	FW-012_100216	Total/NA	Water	1631E	326525
MB 400-326525/1-A	Method Blank	Total/NA	Water	1631E	326525
LCS 400-326525/2-A	Lab Control Sample	Total/NA	Water	1631E	326525
LCSD 400-326525/3-A	Lab Control Sample Dup	Total/NA	Water	1631E	326525

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# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

**Client Sample ID: A73\_100316**

**Date Collected: 10/03/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 12:18	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 10:02	VLC	TAL PEN
Instrument ID: HYDRA										

**Client Sample ID: A75D\_100316**

**Date Collected: 10/03/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 12:26	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 10:11	VLC	TAL PEN
Instrument ID: HYDRA										

**Client Sample ID: A75D\_100316D**

**Date Collected: 10/03/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 12:34	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 10:19	VLC	TAL PEN
Instrument ID: HYDRA										

**Client Sample ID: AR19-3\_100416**

**Date Collected: 10/04/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 12:42	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 10:44	VLC	TAL PEN
Instrument ID: HYDRA										

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# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

**Client Sample ID: AR2-7a\_100416**

**Date Collected: 10/04/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 12:51	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 10:53	VLC	TAL PEN
Instrument ID: HYDRA										

**Client Sample ID: AR2-7\_100416**

**Date Collected: 10/04/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 12:59	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 11:01	VLC	TAL PEN
Instrument ID: HYDRA										

**Client Sample ID: AR2-7\_100416D**

**Date Collected: 10/04/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-7**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 13:07	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 11:09	VLC	TAL PEN
Instrument ID: HYDRA										

**Client Sample ID: FW-012\_100216**

**Date Collected: 10/02/16 00:00**

**Date Received: 10/05/16 09:14**

**Lab Sample ID: 680-130717-8**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Dissolved	Analysis	1631E		1			326666	10/13/16 13:16	VLC	TAL PEN
Instrument ID: HYDRA										
Total/NA	Prep	1631E			40 mL	40 mL	326525	10/12/16 15:35	VLC	TAL PEN
Total/NA	Analysis	1631E		1			326666	10/13/16 11:18	VLC	TAL PEN
Instrument ID: HYDRA										

TestAmerica Savannah

Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLeMore Drive, Pensacola, FL 32514, TEL (850)474-1001



## USEPA

Date Shipped: 10/4/2016

Carrier Name: FedEx

## Gold King Mine Long Term Monitoring

Site #: N/A

Contact Name: Jeff Bryniarski

Contact Phone: 708-284-2490

No: 8-100416-143834-0018



Lab: Test America - Pensacola

Lab Phone: 850-474-1001

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	Lab QC
	A73_100316	Total Hg	Surface Water	10/3/2016	12:15	3	40 mL Glass	None	N
	A73_100316	Dissolved Hg	Surface Water	10/3/2016	12:15	3	40 mL Glass	None	N
	A75D_100316	Total Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	A75D_100316	Dissolved Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	A75D_100316D	Total Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	A75D_100316D	Dissolved Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	AR19-3_100416	Total Hg	Surface Water	10/4/2016	08:10	3	40 mL Glass	None	N
	AR19-3_100416	Dissolved Hg	Surface Water	10/4/2016	08:10	3	40 mL Glass	None	N
	AR2-7a_100416	Total Hg	Surface Water	10/4/2016	12:10	3	40 mL Glass	None	N
	AR2-7a_100416	Dissolved Hg	Surface Water	10/4/2016	12:10	3	40 mL Glass	None	N
	AR7-2_100416	Total Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	AR7-2_100416	Dissolved Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	AR7-2_100416D	Total Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	AR7-2_100416D	Dissolved Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	FW-012_100216	Total Hg	Surface Water	10/2/2016	15:00	3	40 mL Glass	None	N
	FW-012_100216	Dissolved Hg	Surface Water	10/2/2016	15:00	3	40 mL Glass	None	N

Special Instructions: Please send all results to jeff.bryniarski@westonsolutions.com. 10 day turnaround time.

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
SH-PP-NG		10/4/16 15:00		10/5/16	0914

18.4°C JAC 6 680-130717

## USEPA

Date Shipped: 10/4/2016

Carrier Name: FedEx

## Gold King Mine Long Term Monitoring

Site #: N/A

Contact Name: Jeff Bryniarski

Contact Phone: 708-284-2490



680-130717 COC

No: 8-100416-143834-0018

Lab: Test America - Pensacola

Lab Phone: 850-474-1001

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	Lab QC
	A73_100316	Total Hg	Surface Water	10/3/2016	12:15	3	40 mL Glass	None	N
	A73_100316	Dissolved Hg	Surface Water	10/3/2016	12:15	3	40 mL Glass	None	N
	A75D_100316	Total Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	A75D_100316	Dissolved Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	A75D_100316D	Total Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	A75D_100316D	Dissolved Hg	Surface Water	10/3/2016	09:00	3	40 mL Glass	None	N
	AR19-3_100416	Total Hg	Surface Water	10/4/2016	08:10	3	40 mL Glass	None	N
	AR19-3_100416	Dissolved Hg	Surface Water	10/4/2016	08:10	3	40 mL Glass	None	N
	AR2-7a_100416	Total Hg	Surface Water	10/4/2016	12:10	3	40 mL Glass	None	N
	AR2-7a_100416	Dissolved Hg	Surface Water	10/4/2016	12:10	3	40 mL Glass	None	N
	AR7-2_100416	Total Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	AR7-2_100416	Dissolved Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	AR7-2_100416D	Total Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	AR7-2_100416D	Dissolved Hg	Surface Water	10/4/2016	10:35	3	40 mL Glass	None	N
	FW-012_100216	Total Hg	Surface Water	10/2/2016	15:00	3	40 mL Glass	None	N
	FW-012_100216	Dissolved Hg	Surface Water	10/2/2016	15:00	3	40 mL Glass	None	N

**SAMPLES TRANSFERRED FROM**  
**CHAIN OF CUSTODY #**

Special Instructions: Please send all results to jeff.bryniarski@westonsolutions.com. 10 day turnaround time.

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
CHIPPING	<i>Jeff Bryniarski</i>	10/14/16 15:00	<i>Jeff Bryniarski</i>	10/15/16	09/14

18.4°C JRC6

## Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 680-130717-1

Login Number: 130717

List Source: TestAmerica Savannah

List Number: 1

Creator: Daughtry, Beth A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

## Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 680-130717-1

**Login Number: 130717**

**List Number: 2**

**Creator: Perez, Trina M**

**List Source: TestAmerica Pensacola**

**List Creation: 10/12/16 02:59 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	18.4°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	



## Certification Summary

Client: Weston Solutions, Inc.  
Project/Site: GKM - Region 8 (LTM)

TestAmerica Job ID: 680-130717-1

### Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Colorado	State Program	8	N/A	12-31-16

### Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	07-31-16 *
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

\* Certification renewal pending - certification considered valid.

TestAmerica Savannah